

CLAIMS:

1. A method of delivering a test to a candidate, the test having a plurality of questions that are chosen from a plurality of question types ranging from an easiest question type to a hardest question type, the method comprising the sequential steps of:
 - 5 delivering to the candidate a question selected from the easiest question type and, thereafter, delivering to the candidate one or more questions from the same question type;
 - delivering to the candidate a question selected from another of the question types and, thereafter, delivering to the candidate one or more questions from the same
 - 10 question type;
 - wherein at least one question is a "Swaps" question, the "Swaps" question comprising displaying a plurality of images to the candidate in a predetermined spatial relationship and an instruction sequence associated with the images for indicating to the candidate the required reorganisation of the spatial relationship of the images.
- 15 2. A method of delivering a test to a candidate according to claim 1, wherein the test comprises question types 1, 2, ..., n, where type 1 is the easiest question type and type n is the hardest question type, and the method comprises sequentially delivering all the questions of a given question type to the candidate and sequentially delivering to the candidate the question types in the order of question type 1 to question type n.
- 20 3. A method of delivering a test to a candidate according to claim 2, wherein the candidate is only delivered a question when a preceding question in the sequential delivery has been answered.
4. A method of delivering a test to a candidate according to any one of the preceding claims, wherein upon answering a question, the method further comprising
- 25 asking the candidate to indicate his or her confidence that the answer to the question was correct.
5. A method of delivering a test to a candidate according to claim 4, wherein the candidate is asked to indicate his or her confidence that the answer to the question was within one of two or more confidence bands.
- 30 6. A method of delivering a test to a candidate according to any one of the preceding claims, wherein the test is delivered by a testing device that comprises a display for visually displaying a question to the candidate, an input device for allowing the candidate to answer the question and a processor for driving the display and for being responsive to the input device for determining the answer provided by the
- 35 candidate.

7. A method of delivering a test to a candidate according to any one of the preceding claims, wherein the test is contained as question data on a storage medium and the processor selectively accesses the question data to deliver the questions sequentially.
- 5 8. A method of delivering a test to a candidate according to claim 7, wherein the storage medium comprises sequence data representative of the sequence in which the question data is accessed by the processor.
9. A method of delivering a test to a candidate according to claim 7 or 8, wherein the storage medium is controlled by a server that is remote from the processor and
10 which is responsive to predetermined input from the processor for allowing the test to be delivered to the candidate.
10. A method of delivering a test to a candidate according to any one of the preceding claims, wherein the method further comprises recording the time taken for the candidate to read and answer a question.
- 15 11. A method of delivering a test to a candidate according to claim 4 or 5, wherein the method further comprises recording the time taken by the candidate to indicate their confidence.
12. A method of delivering a test to a candidate according to any one of the preceding claims, wherein the method further comprises the step of assessing the
20 relative cognitive ability of the candidate based upon a consideration of any one or more of:
- correctness of some or all of the answers provided by the candidate;
 - time taken to provide those answers; and
 - the relationship between the correctness of some or all the answers and
25 confidence indicated by the candidate that his or her answers to the question was correct.
13. An apparatus for delivering a test to a candidate, the test having a plurality of questions that are chosen from a plurality of question types ranging from an easiest question type to a hardest question type, the apparatus comprising:
- 30 a display for sequentially displaying to the candidate one or more questions selected from the easiest question type;
- input means for allowing the candidate to answer the questions and for triggering the display to display to the candidate the next question in the sequence or, if at the end of the sequence, one or more questions from the next hardest question type;
- 35 wherein at least one question is a "Swaps" question, the "Swaps" question comprising a plurality of images displayed in a predetermined spatial relationship and

an instruction sequence associated with the images for indicating to the candidate the required reorganisation of the spatial relationship of the images.

14. An apparatus for delivering a test to a candidate according to claim 13 or 14, wherein the input means allows the candidate to indicate his or her confidence that the
5 answer to the question was correct.

15. An apparatus for delivering a test to a candidate according to claim 14, wherein the input means allows the candidate to indicate his or her confidence that the answer to the question was within one of two or more confidence bands.

16. An apparatus for delivering a test to a candidate according to any one of claims
10 13 to 15, the apparatus further comprises:

a storage medium on which the test is stored as question data; and

a processor selectively accesses the question data to deliver the questions sequentially.

17. An apparatus for delivering a test to a candidate according to claim 16, wherein
15 the storage medium comprises sequence data representative of the sequence in which the question data is accessed by the processor.

18. An apparatus for delivering a test to a candidate according to claim 16 or 17, wherein the storage medium is controlled by a server that is remote from the processor and which is responsive to predetermined input from the processor for allowing the test
20 to be delivered to the candidate.

19. An apparatus for delivering a test to a candidate according to any one of claims 13 to 18, wherein the apparatus further comprises timing means to record the time taken for the candidate to read and answer a question.

20. An apparatus for delivering a test to a candidate according to any one of claims
25 13 to 18, wherein the apparatus comprises a processor for assessing the relative cognitive ability of the candidate based upon a consideration of any one or more of:

correctness of some or all of the answers provided by the candidate;

time taken to provide those answers; and

the relationship between the correctness of some or all the answers and
30 confidence indicated by the candidate that his or her answers to the question was correct.

21. A method of assessing the relative cognitive ability of a candidate, the assessment having a plurality of questions that are chosen from a plurality of question types ranging progressively from an easiest question type to a hardest question type, the
35 method comprising the sequential steps of:

delivering to the candidate a question selected from the easiest question type;

allowing the candidate to answer the question and, thereafter, delivering to the candidate sequentially one or more questions from the same question type;

determining a quantifier in response to the answers provided by the candidate to the questions of the easiest question type;

- 5 if the quantifier is above a predetermined threshold for delivering to the candidate a question selected from another of the question types, delivering to the candidate a question selected from the said another of the question types and, thereafter, delivering to the candidate one or more questions from the same question type; and

10 deriving an assessment of the relative cognitive ability of a candidate using the quantifier and the question types for which answers have been provided.

22. A method of assessing the relative cognitive ability of a candidate according to claim 21, wherein the said another of the question types is the next question type in the progressive range of question types.

23. A method of assessing the relative cognitive ability of a candidate according to
15 claim 21 or 22, wherein the method comprises determining a second quantifier in response to the answers provided by the candidate to the questions of the said another question types.

24. A method of assessing the relative cognitive ability of a candidate according to claim 23, wherein if the second quantifier is above a predetermined second threshold
20 for delivering to the candidate a question selected from the next question type in the progression of question types, the method further comprises the steps of delivering to the candidate a question selected from the next question type and thereafter, delivering to the candidate one or more questions from the same question type.

25. A method for assessing the relative cognitive ability of a candidate according to
25 any one of claims 21 to 24, wherein at least one question is a "Swaps" question, the "Swaps" question comprising a plurality of images displayed in a predetermined spatial relationship and an instruction sequence associated with the images for indicating to the candidate the required reorganisation of the spatial relationship of the images.

26. A method or apparatus according to any one of claims 21 to 24, wherein the
30 quantifier is determined upon a consideration of any one or more of:

correctness of some or all of the answers provided by the candidate;

time taken to provide those answers; and

the relationship between the correctness of some or all the answers and confidence indicated by the candidate that his or her answers to the question was
35 correct.

27. An apparatus for assessing the relative cognitive ability of a candidate, the assessment having a plurality of questions that are chosen from a plurality of question types ranging progressively from an easiest question type to a hardest question type, the apparatus comprising:

5 a processor for driving a display to deliver to the candidate a question selected from the easiest question type;

an input device for allowing the candidate to answer the question, wherein the processor is responsive to the answer being provided to subsequently deliver to the candidate sequentially one or more questions from the same question type;

10 a calculation module being responsive to the answers provided by the candidate to the questions of the easiest question type for determining a quantifier, wherein the processor is responsive to the quantifier being above a predetermined threshold for driving the display to deliver to the candidate a question selected from another of the question types and, thereafter, delivering to the candidate one or more questions from
15 the same question type; and

an assessment module for being responsive to the quantifier and the question types for which answers have been provided for deriving an assessment of the relative cognitive ability of a candidate.

28. An apparatus for assessing the relative cognitive ability of a candidate according
20 to claim 27, wherein the said another of the question types is the next question type in the progressive range of question types.

29. An apparatus for assessing the relative cognitive ability of a candidate according to claim 27 or 28, wherein the calculation module further determines a second quantifier in response to the answers provided by the candidate to the questions of the
25 said another question types.

30. An apparatus for assessing the relative cognitive ability of a candidate according to claim 29, wherein the processor is also responsive to the second quantifier being above a predetermined second threshold for driving the display to deliver to the candidate a question selected from the next question type in the progression of question
30 types, and thereafter, delivering to the candidate one or more questions from the same question type.

31. An apparatus for assessing the relative cognitive ability of a candidate according to any one of claims 27 to 30, wherein the calculation module determines the quantifier based upon any one or more of:

35 correctness of some or all of the answers provided by the candidate;
time taken to provide those answers; and

the relationship between the correctness of some or all the answers and confidence indicated by the candidate that his or her answers to the question was correct.

32. An apparatus for assessing the relative cognitive ability of a candidate according to any one of claims 27 to 31, wherein at least one question is a "Swaps" question, the "Swaps" question comprising a plurality of images displayed in a predetermined spatial relationship and an instruction sequence associated with the images for indicating to the candidate the required reorganisation of the spatial relationship of the images.

33. A method of assessing the progress of a candidate in response to a learning program, the assessment having a plurality of questions that are chosen from a plurality of question types ranging progressively from an easiest question type to a hardest question type, the method comprising the sequential steps of:

delivering to the candidate a question selected from the easiest question type; allowing the candidate to answer the question and, thereafter, delivering to the candidate sequentially one or more questions from the same question type in response to the preceding question being answered;

determining a quantifier in response to the answers provided by the candidate to the questions of the easiest question type;

if the quantifier is above a predetermined threshold for delivering to the candidate a question selected from another of the question types, delivering to the candidate a question selected from the said another of the question types and, thereafter, delivering to the candidate one or more questions from the same question type; and

deriving an assessment of the relative cognitive ability of a candidate using the quantifier and the question types for which answers have been provided.

34. A method of assessing the progress of a candidate in response to a learning program according to claim 33, wherein the quantifier is determined upon a consideration of any one or more of:

correctness of some or all of the answers provided by the candidate;

time taken to provide those answers; and

the relationship between the correctness of some or all the answers and confidence indicated by the candidate that his or her answers to the question was correct.

35. A method of assessing the progress of a candidate in response to a learning program of any one of claims 33 or 34, wherein at least one question is a "Swaps" question, the "Swaps" question comprising displaying a plurality of images to the candidate in a spatial relationship and an instruction sequence associated with the

images for indicating to the candidate the required reorganisation of the spatial relationship of the images.

36. A "Swaps" question according to any one of claims 1, 13, 25, 32 or 35, wherein the question has three images that are clearly visually distinct.

5 37. A "Swaps" question according to any one of claims 1, 13, 25, 32, 35 or 36, wherein to answer the "Swaps" question, the candidate clicks and drags the images to the spatial locations that are believed to be correct.

38. A "Swaps" question according to any one of claims 1, 13, 25, 32, 35, 36 or 37, wherein a plurality of alternative answers to a "Swaps" question is displayed to the
10 candidate, and the candidate selects one of the alternatives.

39. A method of delivering a test to a candidate according to any one of claims 1 to 12, wherein all the questions are "Swaps" questions and the instruction sequence of each question in a particular question type includes the same number of swap instructions requiring the spatial reorganisation of two images.

15 40. A method of delivering a test to a candidate according to claim 39, wherein the harder the question type, the larger the number of swaps instructions are included in the instruction sequence.

41. An apparatus for delivering a test to a candidate according to any one of claims 13 to 20, wherein all the questions are "Swaps" questions and the instruction sequence
20 of each question in a particular question type includes the same number of swap instructions requiring the spatial reorganisation of two images.

42. A method of delivering a test to a candidate according to claim 41 wherein the harder the question type, the larger the number of swaps instructions are included in the instruction sequence.

25 43. A method for assessing the relative cognitive ability of a candidate according to claim 25, wherein all the questions are "Swaps" questions and the instruction sequence of each question in a particular question type includes the same number of swap instructions requiring the spatial reorganisation of two images.

44. A method of delivering a test to a candidate according to claim 43, wherein the
30 harder the question type, the larger the number of swaps instructions are included in the instruction sequence.

45. An apparatus for assessing the relative cognitive ability of a candidate according to claim 32, wherein all the questions are "Swaps" questions and the instruction sequence of each question in a particular question type includes the same number of
35 swap instructions requiring the spatial reorganisation of two images.

46. A method of delivering a test to a candidate according to claim 45, wherein the harder the question type, the larger the number of swaps instructions are included in the instruction sequence.

5 47. A method for assessing the progress of the candidate in response to a learning program according to claim 35, wherein all the questions are "Swaps" questions and the instruction sequence of each question in a particular question type includes the same number of swap instructions requiring the spatial reorganisation of two images.

48. A method of delivering a test to a candidate according to claim 47, wherein the
10 harder the question type, the larger the number of swaps instructions are included in the instruction sequence.